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REQUEST FOR INTERFERENCE

Applicant is aware of United States Patent Number 6,050,810 issued to Huang on April 18, 2000 and filed on March 22, 1999 that defines the same patentable subject matter contained in Applicant's patent application. Because of this, Applicant requests an interference under 37 C.F.R. §1.607. Huang's patent issued April 18, 2000, and this request for interference is within one year from the date of issuance as required by 35 USC §135(b). Applicant's application claims priority to the non-provisional U.S. Patent Application Serial No. 09/507,100, filed 02/17/2000, which in turn claims priority to a provisional U.S. Patent Application Serial No. 60/126,326, filed March 26, 1999. The effective filing dates of the Huang patent and Applicant's provisional application are within the statutory three months of each other (and in actuality these dates are within 4 days of each other). 37 CFR §1.608(a). Applicant's invention was conceived and reduced to practice in the United States of America before the United States filing date of the Huang patent. Huang, who is a Taiwanese citizen and who invented in Taiwan, does not have any right to claim a date earlier than that of his United States filing date. 35 USC §104.

EXPLANATION OF INVENTION

Applicant's Continuing Application and Preliminary Amendment and the Huang '810 patent have the same subject matter and are not patentably distinct. The invention is a lighter with a child-safety protection mechanism preventing accidental activation. The invention includes a safety button that activates the fuel flow and releases the safety mechanism allowing the trigger to be pressed causing the

igniting device to ignite the fuel and thereby produce flame. The safety button has an external end and an internal end, the internal end pushes against a cam mechanism that has arms or levers. With the safety mechanism engaged, one arm of the cam mechanism acts against the trigger blocking the trigger's movement. By activating the safety button, the fuel is released and the safety button acts against an arm of the cam mechanism disengaging the safety mechanism by releasing the trigger lock and allowing the trigger to be depressed to activate the igniting device.

Although named differently by the two inventors, both the Huang '810 patent and Applicant's application have the same inventive features. They both contain a safety button that performs the same function of releasing the fuel while simultaneously activating the cam mechanism when moved from the non-operational to the operational position. Huang calls the safety button a "Knob" and Applicant refers to the safety button as a "Safety Button."

Both inventions contain the cam mechanism. The cam mechanism acts against the trigger preventing it from being depressed. This unit is called a "latch" in the Huang '810 patent. Huang's "latch" is made up of a pivot shaft having a unit with an arm and a limb, which has a hook to block the trigger. Applicant's cam mechanism has a cam support pin that corresponds with Huang's pivot shaft. Applicant's cam mechanism also has a fuel release lever, a cam lever, and a return spring as a part of its structure.

Huang has a spring biased against the safety button or Knob to close off the fuel supply when the Knob is not activated. Applicant has a return spring biased to return the fuel release lever to the non-operational position when the safety button is not activated.

Applicant's cam mechanism has a cam lever that acts against a stopper tab on the trigger preventing it from being activated. Huang's "latch" has a limb with a "hook to block trigger" that engages with the back of the trigger preventing the trigger from being activated.

5 Although the "stopper tab" and the "latch area" are located in different places on the trigger body, they perform the exact same function in the exact same manner, namely both prevent the trigger from being activated.

Applicant's "cam lever" engages with an appendage located on the trigger preventing activation of the trigger. This "cam lever" performs the same function as Huang's "limb" with "hook to block trigger." These elements have a slightly different appearance, but both have the exact same function of preventing the activation of the trigger by engaging with an appendage located on the trigger. This appendage is called a "stopper tab" by Applicant. In Huang's '810 patent, this area at the back of the trigger is unlabeled but is shown in drawings.

THE COUNT

Applicant proposes the following Count for the interference. This Count defines the invention claimed in both the '810 patent and Applicant's application:

A lighter comprising:

a lighter housing,
a fuel tank located within the lighter housing,
a fuel ignition unit,
a trigger for activating the ignition unit to create a

spark, the trigger being slidably mounted in the lighter housing,

a fuel-release valve,

a spring that engages the fuel release valve to bias the valve in a closed position,

a latch having a normal position that is biased to interfere with the path of said trigger for impeding depression of the trigger,

a release lever having an external end outside of said housing for manipulation by the user from a non-operational to an operational lighting position,

said release lever extending into said housing to engage said latch such that when said external end of said release lever is manipulated by the user, said release lever causes said latch to move out of interference with said trigger to permit depression of said trigger,

said release lever also capable of engaging said fuel release valve such that manipulation of said external end of said release lever causes said valve to move to an open position at the same time that said release lever moves said latch out of interference with said trigger, and,

said release lever biased to automatically return to its non-operational lighting position after manipulation by the user.

APPLICANT'S CONTINUING APPLICATION CLAIMS

Applicant's independent claims 16 and 17 read upon the above Count. Please see the chart below to see a direct claim by claim

comparison. The Applicant's claims that read on the count are:

16. A lighter comprising:

a lighter housing,

a fuel tank, located within the lighter housing for
5 holding the fuel,

a piezoelectric unit for creating a spark,

a trigger, slidably mounted in the lighter housing for
activating the piezoelectric unit, the trigger having a
stopper tab,

10 a fuel-release valve being spring loaded so as to be
urged into the closed position,

a spring mechanism having a non-operational position,
an operational position, a first portion and a second
portion, the first portion locks the trigger when the spring
mechanism is in the non-operational position, the second
15 portion opens the fuel-release valve when the spring
mechanism is in the operational position, the spring
mechanism being urged into the non-operational position, and

20 a safety button for moving the spring mechanism from
the non-operational position to the operational position.

17. A lighter comprising:

a lighter housing,

a fuel tank, located within said lighter housing for
25 holding fuel,

a piezoelectric unit for creating a spark,

a trigger, slidably mounted in the lighter housing for
activating the piezoelectric unit, said trigger having a

stopper tab,

a fuel-release valve being spring-loaded so as to be urged into the closed position,

5 a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, said first portion locks said trigger by interfering with said stopper tab when said spring mechanism is in the non-operational position, said second portion opens said fuel-release valve when said spring mechanism is in said operational position, said spring mechanism being biased into said non-operational position, and

10 a safety button for moving said spring mechanism from said non-operational position to said operational position by moving said first portion of the spring mechanism out of interference with said trigger to allow depression of said trigger and activation of said piezoelectric unit.

HUANG '810 PATENT CLAIMS

Independent Claims 1 and 6 in the Huang '810 patent read on the proposed count. Huang's claims 3-5 and 7-9 depend on independent claims 1 and 6 and only limit the claims by adding additional limitations and do not serve to distinguish the patentable invention. Please see the chart below to see a direct claim by claim comparison. Huang's claims 1-9 read as follows:

25 1. A lighter comprising:

a housing including a valve seat provided therein,
a container received in said housing for receiving gas,
an igniting device received in said housing,

a trigger slidably received in said housing for engaging with and for actuating said igniting device,

a plug slidably received in said housing and including an aperture formed therein,

5 means for biasing said plug to engage with said valve seat and to prevent the gas from flowing into said aperture of said plug,

the gas being allowed to flow into said aperture of said plug when said plug is moved against said biasing means,

10 a latch pivotally secured in said housing and including a hook for engaging with said trigger and for preventing said trigger from being actuated, and

5 a knob slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob being engaged with said latch for disengaging said hook of said latch from said trigger when said knob is moved relative to said housing.

2. The lighter according to claim 1, wherein said housing includes a tube slidably received therein and a sleeve fixed to said tube, said plug includes a front end secured in said tube and includes a rear end for engaging with said tube, said knob includes an orifice formed therein for slidably receiving said sleeve, said sleeve includes a projection for engaging with said tube and for moving said tube and said plug to disengage said plug from said valve seat when said sleeve is moved by said knob.

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3. The lighter according to claim 2, wherein said plug includes an inlet communicating said aperture of said plug with said valve seat.

5 4. The lighter according to claim 2, wherein said housing includes a bearing secured therein for slidably supporting said tube, said bearing is provided for engaging with said sleeve to limit a relative movement of said sleeve relative to said housing.

10 5. The lighter according to claim 1, wherein said knob includes an extension extended therefrom, said latch includes an arm and a limb extended therefrom, and includes a space formed between said arm and said limb for receiving said extension of said knob and for allowing said knob to act on said latch.

15 6. A lighter comprising:
a housing including a valve seat provided therein,
20 a container received in said housing for receiving gas,
an igniting device received in said housing,
a trigger slidably received in said housing for engaging with and for actuating said igniting device,
a plug slidably received in said housing and including
25 an aperture formed therein,
means for biasing said plug to engage with and to block said valve seat,
the gas being allowed to flow into said aperture of said

plug when said plug is moved against said biasing means,

a tube slidably received in said housing,

a sleeve fixed to said tube, said plug including a front end secured in said tube and including a rear end having a projection for engaging with said tube and for moving said tube and said plug to disengage said plug from said valve seat when said sleeve is moved, and

a knob slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob including an orifice formed therein for slidably receiving said sleeve, said knob being provided to engage with said tube and said plug and to disengage said plug from said valve seat when said sleeve is moved by said knob,

said housing including a latch pivotally secured therein and having a hook for engaging with said trigger and for preventing said trigger from being actuated, and said knob being engaged with said latch for disengaging said hook of said latch from said trigger when said knob is moved relative to said housing.

7. The lighter according to claim 6, wherein said plug includes an inlet communicating said aperture of said plug with said valve seat.

8. The lighter according to claim 6, wherein said housing includes a bearing secured therein for slidably supporting said tube, said bearing is provided for engaging with said

sleeve to limit a relative movement of said sleeve relative to said housing.

9. The lighter according to claim 6, wherein said knob includes an extension extended therefrom, said latch includes an arm and a limb extended therefrom, and includes a space formed between said arm and said limb for receiving said extension of said knob and for allowing said knob to act on said latch.

COMPARING CLAIMS CORRESPONDING TO PROPOSED COUNT

Applicant has proposed the Count that embodies the invention in question and upon which Huang's independent claims 1 and 6 and depending claim 2 read, as well as Applicant's claims 16 and 17 read. A comparison of the count with the Huang's claims and Applicant's claims reveals the same patentable subject matter. Since the same patentable subject matter is in question and is claimed by two non-related parties, an Interference must be declared. The following is a line by line comparison of the claims with the Count. The information taken from Huang's and Applicant's claims may not appear in the same order as within the original claims; however, this is done for comparison purposes. All aspects of the Count are explicitly or implicitly included in Huang's and Applicant's claims.

Count line 2 calls for a "lighter housing." This sets out the basic body for a utility lighter, and each of Huang's claims 1 and 6 and Applicant claims 16 and 17 include a lighter housing.

Count line 3 calls for a fuel tank located within the lighter

housing. Huang's claims 1 and 6 and Applicant claims 16 and 17 include the fuel tank.

Count line 4 calls for a fuel ignition unit. Huang includes the igniting device in both claims 1 and 6, as does Applicant in claims 16
5 and 17.

Count line 5 calls for a trigger for activating the ignition unit. The trigger is present in both Huang's and Applicant's claims and is used for the identical purpose of activating an igniting device to create a spark.

10 Count line 7 calls for a fuel-release valve. Huang claims 1 and 6 refer to the fuel release valve as a "plug slidably received in said housing." This plug makes up the fuel release valve in Huang's patent. Applicant refers alternatively in claim 16 to a valve and in claim 17 to a fuel-release valve.

Count line 8 calls for "a spring that engages the fuel release valve to bias the valve in a closed position." Huang claims 1 and 6 include this same element with the same function but describes it in its active state: "the gas being allowed to flow into said aperture of said plug when said plug is moved against said biasing means." In Applicant
20 claims 16 and 17, Applicant refers to the "fuel-release valve being spring loaded so as to be urged into the closed position." Again, the fuel-release valve is biased to the closed position until activated for opening.

Count line 10 calls for a "latch having a normal position that is
25 biased to interfere with the path of the trigger for impeding depression of the trigger." Huang's claim 1 and claim 6 include such an element called a "latch that is pivotally secured in said housing and including a hook for engaging with said trigger and for preventing said trigger

from being actuated." The Huang element has the exact same utility as the latch in the Count. Applicant's claims 16 and 17 also include the same element. In Applicant claims 16 and 17, Applicant refers to this element as a "spring mechanism having a non-operational position, an operational position, a first portion and a second portion, the first portion locks the trigger when the spring mechanism is in the non-operational position." This has the same utility as the corresponding latch in the Count.

Count line 12 calls for a "release lever having an external end outside of said housing for manipulation by the user from an non-operational to an operational lighting position," further having an end that extends into the housing to engage with the latch so that the latch moves out of interference with the trigger. Both Huang claims 1 and 6 have this element but refer to it as a Knob. The "knob is slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob being engaged with said latch for disengaging said hook of said latch from said trigger." This states the activation of the "Knob" from its non-operational to its operational position will remove the trigger interference allowing the trigger to be depressed. Applicant's claims 16 and 17 also include the "safety button for moving the spring mechanism from the non-operational to the operational position" thereby removing the trigger interference and allowing the trigger to be depressed.

Count line 19 calls for a "release lever also capable of engaging said fuel release valve such that manipulation of said external end of said release lever moves said latch out of interference with said trigger. This knob/button is described in Huang claims 1 and 6 in "a knob slidably received in said housing and engaged with said plug for

disengaging said plug from said valve seat, said knob being engaged with said latch for disengaging said hook of said latch from said trigger when said knob is moved relative to said housing." Applicant also has language which refers to this knob/button and its same purpose. Within
5 the context of Applicant claims 16 and 17, the phrase "a safety button for moving the spring mechanism from the non-operational to the operational position" embodies this same element.

Count line 23 calls for "said release lever biased to automatically return to its non-operational lighting position after
10 manipulation by the user." Huang includes this function in claim 1 by describing the "means for biasing said plug to engage with said valve seat and to prevent the gas from flowing into said aperture of said plug." In claim 6, Huang is a little more direct as to the function of a "means for biasing said plug to engage with and to block said valve
15 seat." This biasing means performs the same function of returning the safety device to its non-operational position. Applicant counts 16 and 17 also include this aspect of the invention with the words the "spring mechanism being urged into the non-operational position."

The following chart depicts the Huang '810 independent claims 1
20 and 6 and Applicant's claims 16 and 17 against the claims of the Count. This chart takes each element of the count and matches it against the similar distinct elements contained in the Huang '810 claims 1 and 6 and Applicant's claims. Huang's dependent claims 3-5 and 7-9 are not included in the chart as they only further to narrow the invention and
25 do not address the core of the patentably distinct material in question in the Count.

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CHART COMPARING CLAIMS CORRESPONDING TO COUNT

| | PROPOSED COUNT | HUANG CLAIM 1 | HUANG CLAIM 6 | APPLICANT CLAIM 1 | APPLICANT CLAIM 2 |
|---|--|--|--|--|---|
| 1 | A lighter comprising: a lighter housing, | A lighter comprising: a housing including a valve seat provided therein, | A lighter comprising: a housing including a valve seat provided therein, | A lighter comprising: a lighter housing, | A lighter comprising: a lighter housing, |
| 2 | a fuel tank located within the lighter housing, | a container received in said housing for receiving gas, | a container received in said housing for receiving gas, | a fuel tank, located within the lighter housing for holding the fuel, | a fuel tank, located within said lighter housing for holding fuel, |
| 3 | and a fuel ignition unit, | an igniting device received in said housing, | an igniting device received in said housing, | a piezoelectric unit for creating a spark, | and a piezoelectric unit for creating a spark, |
| 4 | a trigger for activating the ignition unit to create a spark, the trigger being slidably mounted in the lighter housing, | a trigger slidably received in said housing for engaging with and for actuating said igniting device, | a trigger slidably received in said housing for engaging with and for actuating said igniting device, | a trigger, slidably mounted in the lighter housing, for activating the piezoelectric unit, the trigger having a stopper tab, | a trigger, slidably mounted in the lighter housing, for activating the piezoelectric unit, said trigger having a stopper tab, |
| 5 | a fuel-release valve, | a plug slidably received in said housing and including an aperture formed therein, | a plug slidably received in said housing and including an aperture formed therein, | a fuel-release valve being spring-loaded so as to be urged into a closed position, | a fuel-release valve being spring-loaded so as to be urged into a closed position, |
| 6 | a spring that engages the fuel release valve to bias the valve in a closed position, | the gas being allowed to flow into said aperture of said plug when said plug is moved against said biasing means, | the gas being allowed to flow into said aperture of said plug when said plug is moved against said biasing means, | a fuel-release valve being spring-loaded so as to be urged into the closed position; | a fuel-release valve being spring-loaded so as to be urged into the closed position; |
| 7 | a latch having a normal position that is biased to interfere with the path of said trigger for impeding depression of the trigger, | a latch pivotally secured in said housing and including a hook for engaging with said trigger and for preventing said trigger from being actuated, and | said housing including a latch pivotally secured therein and having a hook for engaging with said trigger and for preventing said trigger from being actuated, and said knob being engaged with said latch for disengaging said hook of said latch from said trigger when said knob is moved relative to said housing. | a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, the first portion locks the trigger when the spring mechanism is in the non-operational position, the second portion opens the fuel-release valve when the spring mechanism is in the operational position, the spring mechanism being urged into the non-operational position, and | a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, the first portion locks said trigger when said spring mechanism is in the non-operational position, said second portion opens said fuel-release valve when said spring mechanism is in said operational position, said spring mechanism being biased into said non-operational position; and |

CHART COMPARING CLAIMS CORRESPONDING TO COUNT

| | PROPOSED COUNT | HUANG CLAIM 1 | HUANG CLAIM 6 | APPLICANT CLAIM 1 | APPLICANT CLAIM 2 |
|---|---|---|---|--|---|
| 8 | a release lever having an external end outside of said housing for manipulation by the user from a non-operational to an operational lighting position, said release lever extending into said housing to engage said latch such that when said external end of said release lever is manipulated by the user, said release lever causes said latch to move out of interference with said trigger to permit depression of said trigger; | a knob slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob being engaged with said latch for disengaging said hook of said latch from said trigger when said knob is moved relative to said housing. | a knob slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob including an orifice formed therein for slidably receiving said sleeve, said knob being provided to engage with said tube and said plug and to disengage said plug from said valve seat when said sleeve is moved by said knob, | a safety button for moving the spring mechanism from the non-operational position to the operational position. | a safety button for moving said spring mechanism from said non-operational position to said operational position by moving said first portion of the spring mechanism out of interference with said trigger to allow depression of said trigger and activation of said piezoelectric unit. |
| 9 | said release lever also capable of engaging said fuel release valve such that manipulation of said external end of said release lever causes said valve to move to an open position at the same time that said release lever moves said latch out of interference with said trigger, and, | a knob slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob being engaged with said latch for disengaging said hook of said latch from said trigger when said knob is moved relative to said housing. | a knob slidably received in said housing and engaged with said plug for disengaging said plug from said valve seat, said knob including an orifice formed therein for slidably receiving said sleeve, said knob being provided to engage with said tube and said plug and to disengage said plug from said valve seat when said sleeve is moved by said knob, | a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, the first portion locks the trigger when the spring mechanism is in the non-operational position, the second portion opens the fuel-release valve when the spring mechanism is in the operational position, the spring mechanism being urged into the non-operational position, and a safety button for moving the spring mechanism from the non-operational position to the operational position. | a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, said first portion locks said trigger by interfering with said stopper tab when said spring mechanism is in the non-operational position, said second portion opens said fuel-release valve when said spring mechanism is in said operational position, said spring mechanism being biased into said non-operational position, and a safety button for moving said spring mechanism from said non-operational position to said operational position by moving said first portion of the spring mechanism out of interference with said trigger to allow depression of said trigger and activation of said piezoelectric unit. |

CHART COMPARING CLAIMS CORRESPONDING TO COUNT

| | PROPOSED COUNT | HUANG CLAIM 1 | HUANG CLAIM 6 | APPLICANT CLAIM 1 | APPLICANT CLAIM 2 |
|----|--|---|--|--|---|
| 10 | said release lever biased to automatically return to its non-operational lighting position after manipulation by the user. | means for biasing said plug to engage with said valve seat and to prevent the gas from flowing into said aperture of said plug, | means for biasing said plug to engage with and to block said valve seat, | a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, the first portion locks the trigger when the spring mechanism is in the non-operational position, the second portion opens the fuel-release valve when the spring mechanism is in the operational position, the spring mechanism being urged into the non-operational position, and | a spring mechanism having a non-operational position, an operational position, a first portion and a second portion, said first portion locks said trigger by interfering with said stopper tab when said spring mechanism is in the non-operational position, said second portion opens said fuel-release valve when said spring mechanism is in said operational position, said spring mechanism being biased into said non-operational position, and |

DEPENDING CLAIMS NOT COMPARED TO COUNT BECAUSE THEY
ONLY SERVE TO LIMIT THE INVENTION

Huang's claims 2-5 depend from claim 1. Huang's claims 7-9 depend from claim 6. These dependent claims are not patentably distinct from the count and therefore while not identical to the Count, correspond substantially to the Count. For this reason, the dependent claims must be included in the interference. See 35 CFR §1.601(f). The dependent claims only serve as limitations to the invention and do not present inventive matter. Huang's dependent claims are discussed as follows.

Huang claim 2 depends on claim 1 and serves to instruct by defining limitations to the invention that are included within the prior art. Huang claim 3 depends on claim 2 and serves only to instruct that the plug has an inlet for communicating with the valve seat, a limitation on the patentable invention that exists in the prior art. Claim 4 depends on claim 2 and serves only to instruct that the tube contained in claim 2 can be secured with a bearing. Claim 5 depends on claim 1 and serves only to describe the action of the Knob on the latch.

Huang's claim 7 depends on claim 6 and serves only to instruct that the plug has an inlet for communicating with the valve seat, a limitation on the patentable invention that exists in the prior art. Claim 8 depends on claim 6 and serves only to instruct that the tube contained in claim 6 can be secured with a bearing. Claim 9 depends on claim 6 and serves only to describe the action of the Knob on the latch.

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CONCLUSION

Applicant requests that Examiner add the above requested claims to Applicant's continuing application. Further, Applicant requests this interference because of identical nature of the subject matter of both
5 Applicant's application and the Huang '810 patent and because of the non-common ownership of the applications involved. Applicant's application is based on provisional application Serial No. 60/126,326 filed March 26, 1999. The Huang patent was filed March 22, 1999.

Respectfully Submitted,
TROJAN LAW OFFICES

Dated: November 17, 2000

By

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